

Patent Claims

1. An air conditioning system for a motor vehicle, with a plurality of zones, characterized in that an air-flow compensation device (12) is provided between at least two of the individual zones.
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2. The air conditioning system for a motor vehicle as claimed in claim 1, characterized in that the air-flow compensation device (12) is formed by at least one air-flow control element (13) which can open and close at least one region of a partition (10) between two zones.
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3. The air conditioning system for a motor vehicle as claimed in claim 1 or 2, characterized in that the air-flow control element (13) is designed in the form of a flap or an arrangement of a plurality of flaps.
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4. The air conditioning system for a motor vehicle as claimed in one of the preceding claims, characterized in that the air-flow control element (13) is formed from one or more flaps of the flag type.
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5. The air conditioning system for a motor vehicle as claimed in one of the preceding claims, characterized in that the air-flow control element (13) is formed from one or more flaps of the butterfly type.
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6. The air conditioning system for a motor vehicle as claimed in one of the preceding claims, characterized in that the air-flow control element (13) is formed from one or more louver-type flaps.
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7. The air conditioning system for a motor vehicle as claimed in one of the preceding claims, characterized in that the air-flow control element (13) is formed from one or more rolling-belt cassettes.
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8. The air conditioning system for a motor vehicle as claimed in claim 1 or 2, characterized in that the air-flow compensation device (12) is formed by at least one bypass (14) which is provided between two zones.

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9. The air conditioning system for a motor vehicle as claimed in one of the preceding claims, characterized in that the air-flow compensation device (12) can be regulated.

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10. The air conditioning system for a motor vehicle as claimed in one of the preceding claims, characterized in that the air-flow compensation device (12) makes provision for the flow surfaces through which the flow 15 can pass in individual operating states to be able to be changed, with a flow surface assigned to the rear region of the motor vehicle being added, if the need arises, with the aid of the air-flow compensation device (12) to the flow surface assigned in normal 20 operation to the front region of the motor vehicle.

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11. The air conditioning system for a motor vehicle as claimed in one of the preceding claims, characterized in that the air-flow compensation device (12) is arranged between mixing spaces or air ducts for the 25 front region and the rear region.

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12. The air conditioning system for a motor vehicle as claimed in one of the preceding claims, characterized in that an air-flow compensation by means of the air-flow compensation device (12) is provided in the defrost mode.

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13. The air conditioning system for a motor vehicle as claimed in one of the preceding claims, characterized in that the air conditioning system comprises at least one of the following components: heat exchanger, heating element, evaporator, filter, temperature mixing

flap, mixing chamber, one or more flow ducts and one or more control flaps for distributing the air to the outlet ducts.

- 5 14. A method for regulating a multi-zone air conditioning system for a motor vehicle, characterized in that an air-flow compensation between at least two zones takes place in at least one operating state.
- 10 15. The method as claimed in claim 14, characterized in that the air-flow compensation takes place in the defrost mode.